

## **REMARKS**

Claims 1, 2, 4, and 8-22 stand rejected in the Office Action dated 1/31/08. Claims 9, 10, and 18 have been objected to. Claim 10 has been canceled and claim 8 has been amended. Therefore, following entry of the present response, claims 1, 2, 4, 8, 9, and 11-22 will be pending.

### **Summary of Telephonic Interview**

The undersigned wishes to thank the Examiner's supervisor for taking the time to conduct a telephonic interview on Tuesday, April 15, 2008 at 2:00pm. During the interview, the Section 112 and the Section 103 rejections were briefly discussed and the points below were presented. With respect to the Section 112 rejection, the undersigned provided support from the Applicant's Specification for the rejected claim language. With respect to the Section 103 rejection, the Applicants requested evidentiary support for the rejection of the claim elements for which Official Notice was taken, and the Examiner's supervisor agreed that the Examiner would provide such evidentiary support. The undersigned also provided distinctions between the claims and the cited references. While no agreement was reached, the Examiner's supervisor indicated that the Examiner would further consider the points raised.

### **Claim Objections**

Claims 9, 10, and 18 were objected to due to informalities in the claims. Applicant has amended the claims as suggested by the Examiner and canceled claim 10. Therefore, applicant respectfully requests withdrawal of the claim objections.

### **35 U.S.C. §112 Rejection**

Claims 1, 2, 4, 8-22 stand rejected under 35 U.S.C. § 112, first paragraph, for allegedly failing to comply with the written description requirement. More specifically, the Office Action asserts that the claims contain subject matter which was not sufficiently described in the specification. However, Applicant submits that "procedural-oriented" programming code is not only specifically disclosed in Applicant's Specification in

paragraph [0048], but the integration of example procedural-oriented programming codes are disclosed in cooperation with each of the recited elements. For example, paragraph 0027 of Applicant's Specification discloses the use of a code generator with code in one or more languages, and the list includes specific procedural-oriented codes (*e.g.*, Algol). Adding a feature to the claims to include a feature that was originally disclosed in the specification is not new matter. Thus, the "procedural-oriented" feature added to the claims is enabled by the Applicant's Specification as originally filed.

Accordingly, applicant respectfully requests withdrawal of the rejection of claims 1, 2, 4, 8-22 under 35 U.S.C. § 112, second paragraph.

### **35 U.S.C. §103 Rejection**

Claims 8, 9, 12, 15, 16, 19, and 20 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,502,239 ("Zgarba") in view of official notice taken by the Examiner. Claims 1, 2, 4, 10, 11, 17, 18, 21, and 22 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Zgarba in view of U.S. Patent No. 6,199,195 ("Goodwin") and in view of official notice taken by the examiner.

### **Official Notice taken - Claims 1, 2, 4, 8-22**

Applicant traverses the official notice taken by the Examiner, in particular, that it is "old and well-known within the computing art to process source code from an innermost element to an outermost element." Applicant respectfully points out that pursuant to M.P.E.P. §2144.03(a), the Examiner cannot remedy the deficiency as noted above in the teaching of the Zgarba reference merely by asserting what is "well known" in the art. Rather the Patent Office must demonstrate all claim limitations based on substantial evidentiary support. For example, the cited section of the M.P.E.P. states:

Office notice unsupported by documentary evidence should only be taken by the examiner where the facts asserted to be well-known, or to be common knowledge in the art are capable of instant and unquestionable demonstration as being well-known. As noted by the court in *In re Ahlert*, 424 F.2d 1088, 1091, 165 USPQ 418, 420 (CCPA, 1970), the notice of facts beyond the record which may be taken by the examiner must be "capable of such instant and unquestionable demonstration as to defy dispute" (citing *In re Knapp Monarch Co.*, 296 F.2d 230, 132 USPQ 6 (CCPA 1961)).

Applicant respectfully submits that the facts of which the examiner has taken official notice are not so well known as to be capable of instant and unquestioning demonstration as being well known, as is evidenced by the lack of any such instant and unquestioning demonstration in the evidence of record. Thus, Applicant requests either evidentiary support for the aforementioned features for which official notice was taken, or an affidavit/declaration under 37 C.F.R. 1.104(d)(2) if the official notice is based on personal knowledge of the examiner that isn't supported by such evidentiary support.

Despite Applicant's traversal of the official notice taken by the Examiner for the aforementioned features in claims 1, 2, 4, 8-22, Applicant submits that the features for which official notice were taken do not cure the deficiencies of Zgarba or Goodwin with respect to the remaining claim elements, as discussed below.

#### **Claims 8, 9, 12, 15, 16, 19, 20**

Claims 8, 9, 12, 15, 16, 19, 20, and 22 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,502,239 ("Zgarba") in view of official notice taken by the Examiner. Applicant respectfully disagrees with the Examiner that these claims are obvious and traverse the taking of official notice.

Amended claim 8 is as follows:

8. (Currently Amended) A method of automatically generating procedural-oriented output source code from a functional software model comprising:

processing a block of procedural-oriented programming code from an innermost element to an outermost element and generating from the processed block of procedural-oriented programming code a functional software model, wherein the block of procedural-oriented programming code is in at least one initial language;

defining a plurality of code elements within the block of procedural-oriented programming code;

specifying a structure of the block of procedural-oriented programming code including the plurality of code elements; and

generating from the plurality of code elements and the structure of the block of procedural-oriented programming code including the plurality of code elements a graphical representation of the plurality of code elements and flow of the block of procedural-oriented programming code; and

specifying at least one target language in which procedural-oriented output source code for the graphical representation is to be generated, wherein the at least one target

language specified is different from the initial language of the processed block of procedural-oriented programming code.

Applicant submits that Zgarba in view of the official notice taken by the examiner does not teach the elements of the claim, in particular as amended. Independent claim 8 is directed to processing a block of procedural-oriented programming code and generating a graphical representation of a plurality of code elements and flow of the block. The claimed block of code may be in at least one initial language, and at least one target language is specified for which procedural-oriented output source for the graphical representation is to be generated. The target language may be different from an initial language of the processed block. Thus, as described in Applicant's Specification, the claimed elements provide for a method of generating a functional model for blocks of code, each of which may be in various programming languages. Modeling the code in this manner enables the code structure and flow, in any number of languages, to be functionally modeled, and then output source code, in any number of languages, may be selected for the resulting code.

Zgarba, on the other hand, updates source code in the same language for which it was originally written. While Zgarba's method may operate to regenerate source code for various languages, Zgarba operates on each section of code to produce a target code that is in the same language as the initial language. As described in Zgarba, a software model may be forward engineered to generate source code for a project. When the software project is reverse engineered from source code, and the software model is forward engineered, the resultant code should be *essentially the same* (Zgarba, Col. 4, lines 15-24). The importance of this aspect of Zgarba is further described, in that the existing source code is merged with data from the software model to generate new source code. Non-updated portions of the existing source code may be maintained and merged with the updated source code, to replace the existing source code. (Zgarba, Col. 4, lines 35-40). If Zgarba attempted to function as the claimed elements, Zgarba's reverse engineered source code could not be compared to the existing source code, an integral part of Zgarba's method, and non-updated portions of source code could not be merged with existing portions of source code, also an integral part of Zgarba's method.

When explaining how and why the examiner can not change the principle of operation of the cited reference or render the cited reference inoperable for its intended purpose. See MPEP 2143.01 V and VI. As described herein, the reverse-engineering/forward-engineering methods of Zgarba would not operate as described if an initial language was different from a target language, as recited in the claims. Thus, Applicant submits that Zgarba in view of the official notice taken by the examiner does not teach the elements of independent claim 8 and, thus, claim 8 is in condition for allowance.

Applicant traverses the official notice taken by the Examiner for the aforementioned features in claims 8, 9, 12, 15, 16, 19, and 20. However, despite the traversal, Applicant submits that the features for which official notice were taken do not cure the deficiencies of Zgarba with respect to the remaining claim elements.

Accordingly, applicant respectfully requests withdrawal of the rejection of independent claim 8, and claims 9, 12, 15, 16, 19, and 20 that depend therefrom, under 35 U.S.C. § 103(a).

**Claims 1, 2, 4, 10, 11, 17, 18, 21, and 22**

Claims 1, 2, 4, 10, 11, 17, 18, 21, and 22 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Zgarba in view of U.S. Patent No. 6,199,195 (“Goodwin”) and in view of official notice taken by the examiner.

Independent claim 1 is directed to generating source code from a functional model. The Office Action asserts that Goodwin teaches “a selector for selecting at least one of a plurality of programming languages in which to generate functional output source code from the functional model.” Applicant respectfully disagrees that Goodwin teaches the claimed element. Rather, the selection in Goodwin (col 13, lines 44-55) is not the selection of at least one of a plurality of procedural-oriented programming languages for the output source code. Goodwin’s selection is a selection of a data model to use for the creation of code. The language itself is not chosen in Goodwin, but rather, the data model to be used for the creation of code.

Furthermore, the MPEP provides several guidelines for rejecting a claim under 35 U.S.C. 103(a). Specifically, reference is made to MPEP § 2141. III Rationales To Support Rejections Under 35 U.S.C. 103, which states in part:

“Office personnel must explain why the differences(s) between the prior art and the claimed invention would have been obvious to one of ordinary skill in the art. ... The key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. The Supreme Court in *KSR* noted that the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit. The Court quoting *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006), stated that “‘[R]ejections on obviousness cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.’” *KSR*, 550 U.S. at \_\_\_, 82 USPQ2d at 1396.” (Emphasis added)

Additionally, the Examiner should explain how to combine the references, per MPEP 706.02(j).

“35 U.S.C. 103 authorizes a rejection where, to meet the claim, it is necessary to modify a single reference or to combine it with one or more other references. After indicating that the rejection is under 35 U.S.C. 103, the examiner should set forth in the Office action: (A) the relevant teachings of the prior art relied upon, preferably with reference to the relevant column or page number(s) and line number(s) where appropriate, (B) the difference or differences in the claim over the applied reference(s), (C) the proposed modification of the applied reference(s) necessary to arrive at the claimed subject matter, and (D) an explanation >as to< why >the claimed invention would have been obvious to< one of ordinary skill in the art at the time the invention was made\*.” (Emphasis added)

When explaining how and why the examiner can not change the principle of operation of the cited reference or render the cited reference inoperable for its intended purpose. See MPEP 2143.01 V and VI.

The examiner does not describe how Zgarba would be modified to incorporate the data model selection feature of Goodwin for procedural-oriented source code. Goodwin, in general, is directed to generating *objects* where the input to the modeler is within an *object framework* (Goodwin, col. 4, ll. 1-2) The modeler in Goodwin models objects or data in object classes, which is a useful tool in object-oriented programming. Further, the code generator in Goodwin “reads the object elements” and “applies a set of known templates ...

**DOCKET NO.:** MSFT-2792/306045.01  
**Application No.:** 10/720,506  
**Office Action Dated:** January 31, 2008

**PATENT**

to the object elements of the unified models to produce a set of source code objects.”  
(Goodwin, col. 13, ll. 20-27). Thus, in light of the official action that code is written in procedural-oriented code, the examiner does not describe how Goodwin, which does not apply for procedural-oriented code, can be combined with Zgarba to teach the claimed elements.

Accordingly, applicant respectfully requests withdrawal of the rejection of independent claim 1, and claims 2, 4, 10, 11, 17, 18, and 21 that depend therefrom, under 35 U.S.C. § 103(a).

### **CONCLUSION**

For the foregoing reasons, Applicant respectfully submits that all of the claims of the present application patentably define over the prior art of record. Reconsideration of the Office Action and a Notice of Allowance are respectfully requested. In the event that the Examiner cannot allow the present application for any reason, the Examiner is encouraged to contact the undersigned attorney, Lori Swanson at (215) 564-8997 to discuss the resolution of any remaining issues.

Regards,

Date: April 30, 2008

**/Lori Anne D. Swanson/**  
Lori Anne D. Swanson  
Registration No. 59,048

Woodcock Washburn LLP  
Cira Centre  
2929 Arch Street, 12th Floor  
Philadelphia, PA 19104-2891  
Telephone: (215) 568-3100  
Facsimile: (215) 568-3439